## SUMMARY OF STATEMAP
## GEOLOGIC MAPPING PROGRAM IN ARIZONA

| Fiscal Year | Project Title | State Dollars | Federal Dollars | Total Dollars |
|---|---|---|---|---|
| 1993 | Western Arizona: SE Plomosa Mts., 1:12,000; Tank and Palomas Mts., 1:24,000; central Gila Bend Mts., 1:50,000; Salome and Little Horn 30' x 60' sheets, 1:100,000 | 92,464 | 80,161 | 172,625 |
| 1994 | Northeast of Phoenix: Picketpost Mt., Superstition Mts. SW, 1:24,000; east ½ of Mesa 30' x 60' Quad., 1:100,000; surficial maps of ten 7 1/2' quads northeast of Phoenix | 80,000 | 80,000 | 160,000 |
| 1995 | Northeast of Phoenix: Apache Junction and Buckhorn 7 1/2' quads, 1:24,000; Mesa 30' x 60', 1:100,000; surficial maps of five 7 1/2' quadrangles NE of Phoenix | 55,000 | 55,000 | 110,000 |
| 1996 | East of Phoenix: Mormon Flat Dam and Horse Mesa 7 1/2' Quadrangles, 1:24,000; surficial map of Theodore Roosevelt Lake 30' x 60' Quadrangle, 1:100,000 | 136,247 | 136,247 | 272,494 |
| 1997 | East of Phoenix: Five 7 1/2' quads, 1:24,000; Digital maps of Mesa, western Theodore Roos. Dam, Globe 30' x 60' Quads; Surficial maps, Casa Grande area, six 7 1/2' Quads | 151,042 | 151,036 | 302,078 |
| 1998 | North and west of Tucson: Sawtooth Mts., Samaniego Hills, Picacho Mts., and Ninetysix Hills, 1:24,000; Surficial maps of Tucson Mts.and Catalina Foothills | 135,582 | 135,577 | 271,159 |
| 1999 | Greater Tucson area: Avra Valley, Roskruge Mts, six 7 1/2' quads, 1:24,000; Oracle - Catalina area, two 7 1/2' quads, 1:24,000; Green Valley, four 7 1/2' quads, 1:24,000 | 127,123 | 126,401 | 253,524 |
| 2000 | Phoenix - Tucson corridor: Mescal - Vail area, four 7 1/2' quads; surficial maps, Tubac area, two 7 1/2' quads; digital maps, Tucson - Phoenix corridor, 1:24,000 and 1:100,000 | 147,633 | 145,535 | 293,168 |
| 2001 | Phoenix - Tucson corridor: NW Tucson area, 1;24,000; Buckeye Hills, Phoenix area, 1:24,000; Digital compilation, Tucson - Phoenix corridor, 1:24,000 and 1:100,000 | 227,614 | 227,325 | 454,939 |
| 2002 | Phoenix-Tucson corridor: Sierrita Mts., 1:24,000; Benson-Huachuca City, 1:24,000; digital map compilation, east Phoenix area. | 235,414 | 235,000 | 470,414 |
| 2003 | Southern and western Arizona: Hassayampa Plain 1:24,000; Southeast Tucson 1:24,000; Bullhead City 1:24,000; Digital map compilation, Phoenix area. | 211,174 | 210,665 | 421,839 |
| 2004 | Southern and western Arizona: San Pedro trough 1:24,000; western Maricopa County 1:24,000; eastern Pima County digital compilation, 1:100,000 | 220,791 | 217,439 | 438,230 |
| 2005 | Southern and western Arizona: San Pedro trough 1:24,000; Bullhead City 1:24,000; east Yuma 1:24,000; Gila Bend, Casa Grand, San Manuel digital compilations, 1:100,000 | 197,977 | 197,977 | 434,878 |
| | **TOTALS** | **2,018,061** | **1,998,363** | **4,016,424** |

For the past 50 years Arizona has had one of the fastest population-growth rates in the U.S. Most of the growth has been, and will continue to be, in the metropolitan Phoenix and Tucson areas in southern Arizona. Approximately 80 percent of Arizona's population of 5 million people live in the 20 percent of the state known as the Phoenix-Tucson metropolitan corridor. The rest of the State is also experiencing rapid population growth, but populations are much smaller.

In recognition of this large and rapidly growing population, and to follow the intent of the National Geologic Mapping Act to address societal needs, the Arizona Geologic Mapping Advisory Committee strongly recommended that the Arizona Geological Survey give highest priority to completing detailed geologic maps and digital map products in the Phoenix-Tucson corridor. The Arizona Geological Survey has largely completed mapping this area, and is beginning to focus mapping on outlying, smaller communities and developing areas. The Advisory Committee will recommend priorities for mapping in these outlying areas.

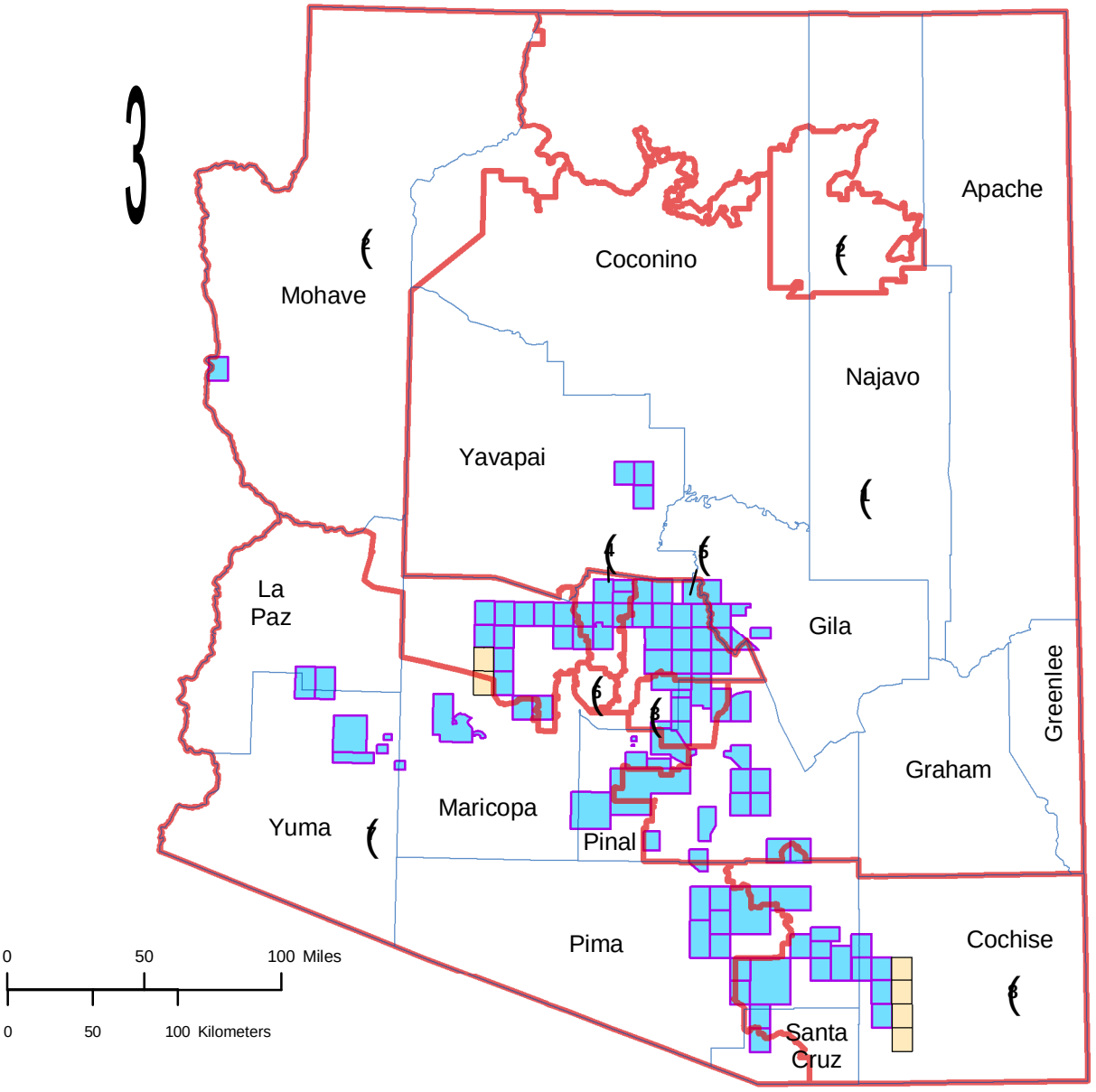
In a recent outcome of geologic mapping in Arizona, a building materials company was able to locate a groundwater source that they needed to open a quarry. In a letter dated Sept, 2, 2004, Robert A. Lindsell Jr., of Kalamazoo Materials, Inc., stated the following: "Well, it's been almost a year since we hit the "big well" at our Durham Hills Quarry and I thought it was time I officially thank you and the staff at the Arizona Geological Survey for your part in making our project a success.…we had spent over $40,000 with nothing to show for it except 2 dry holes to 1200 ft. each. By having the recently completed geologic maps of the Durham Hills and Chief Butte areas (DGM-19 & DGM-22) available as reference material, we were able to reason the confidence we needed to aim our drill at the buried detachment fault in the area…" The water source was found in the crushed rocks along the buried fault. (These two maps were STATEMAP deliverables for 2001).

Association of American State Geologists

United States Geological Survey

# NATIONAL COOPERATIVE GEOLOGIC MAPPING PROGRAM

STATEMAP Component: States compete for federal matching funds for geologic mapping




## Geologic Maps funded by STATEMAP, Arizona, 1994-2005

**Map Legend**

- County boundaries
- Congressional District boundaries
- (6) Congressional District Numbers

**Geologic Maps (Open-File Reports and Digital Geologic Maps)**

- 1:24,000-scale bedrock and surficial mapping
- In Progress 1:24,000-scale bedrock and surficial maps

Updated March, 2005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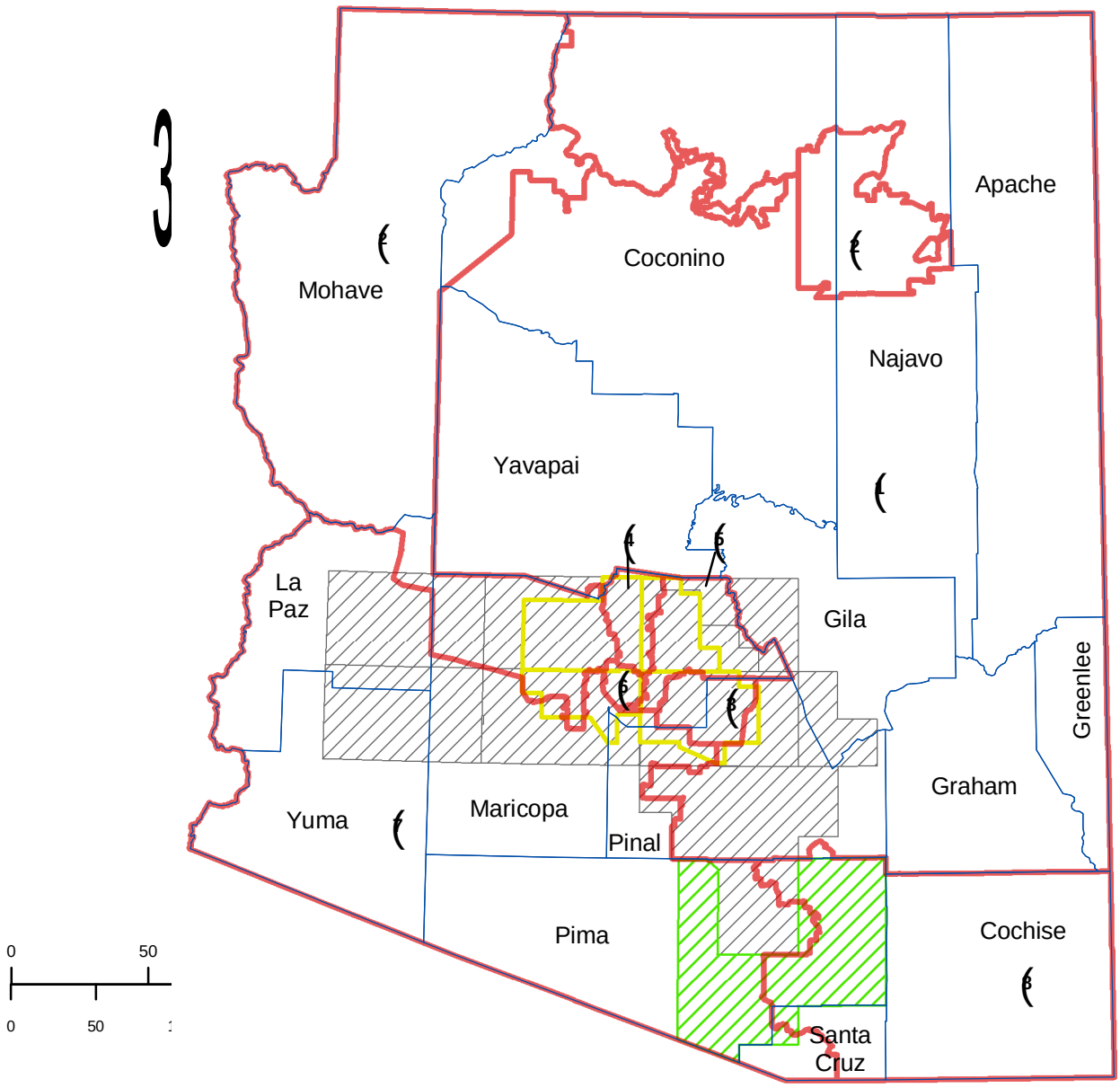
# NATIONAL COOPERATIVE GEOLOGIC MAPPING PROGRAM




## Geologic Digital Information products funded by STATEMAP, Arizona, 1994-2005

**Map Legend**

- County boundaries
- Congressional District boundaries
- (6) Congressional District Numbers

**Digital Information Products**

- 1:24,000-scale digital geologic database
- 1:100,000-scale compilation digital geologic database
- In preparation 1:100,000-scale digital geologic database

* *Not shown is the "Geologic Map of Arizona, GIS Database, Version 3.0", a digital geologic database covering the entire state (DI-08, v. 3.0).*

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